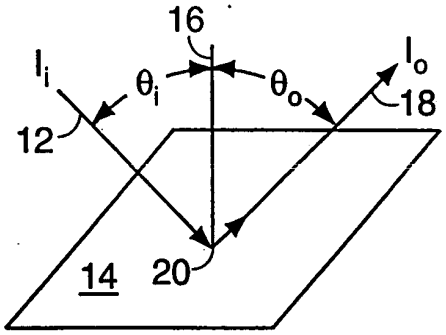

FIG. 1

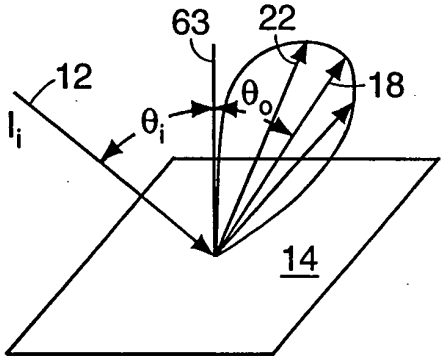

FIG. 2

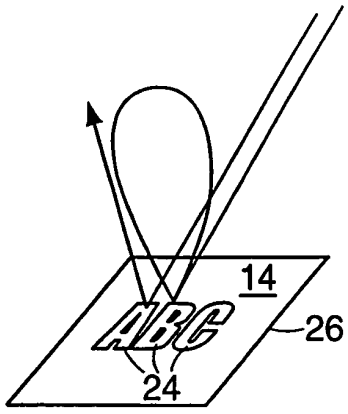

FIG. 3

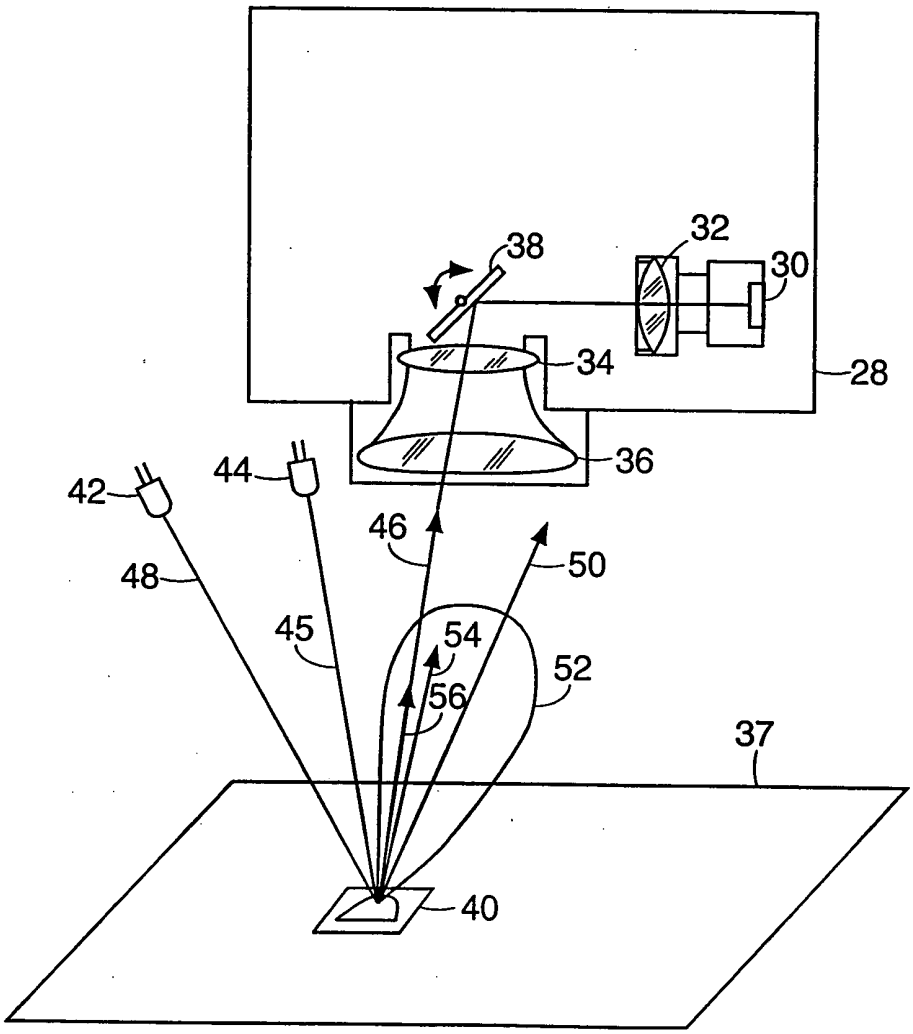

FIG. 4

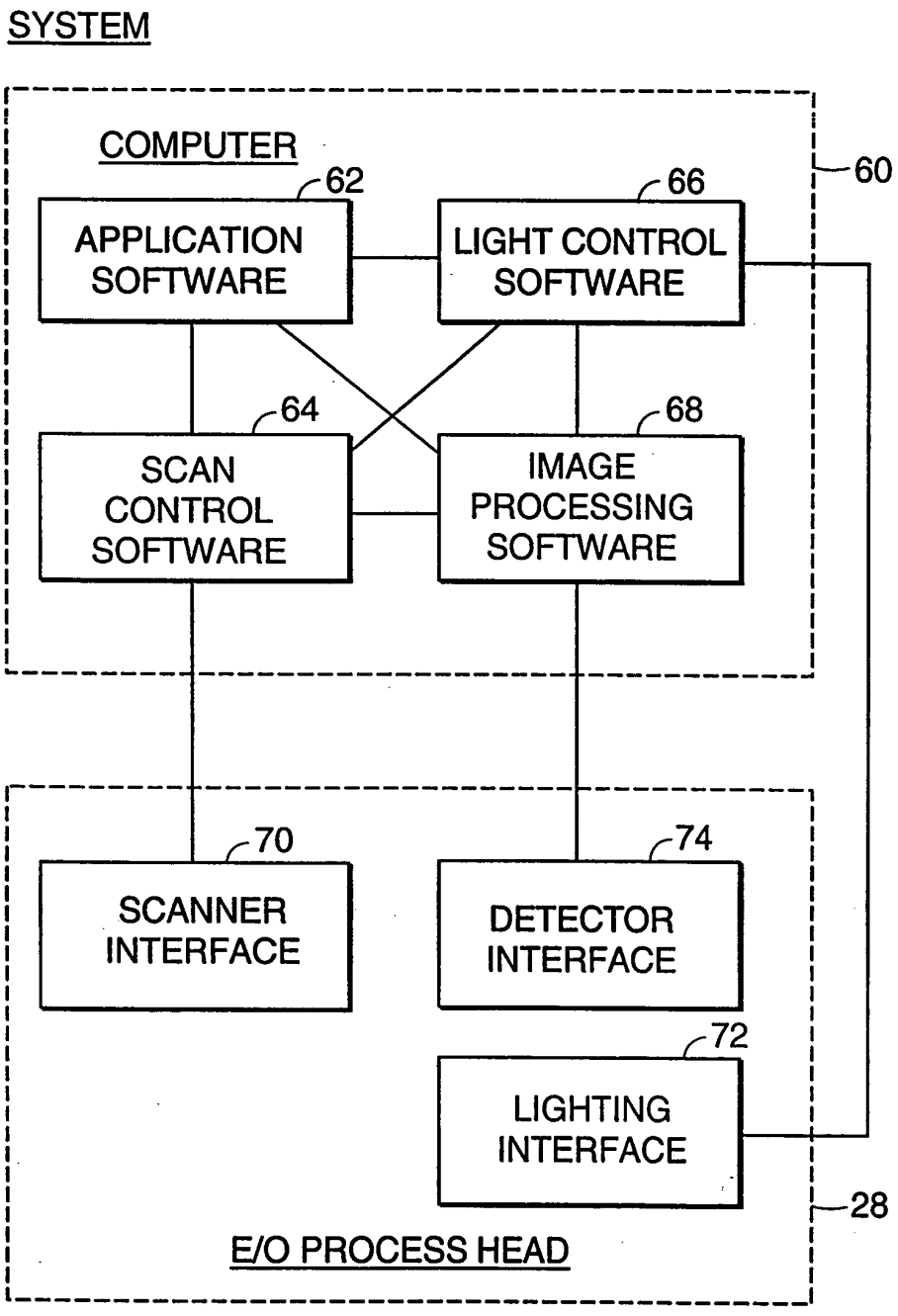
SYSTEM
COMPUTER
60
62
APPLICATION SOFTWARE
66
LIGHT CONTROL SOFTWARE
64
SCAN CONTROL SOFTWARE
68
IMAGE PROCESSING SOFTWARE
70
SCANNER INTERFACE
74
DETECTOR INTERFACE
72
LIGHTING INTERFACE
28
E/O PROCESS HEAD

FIG. 5

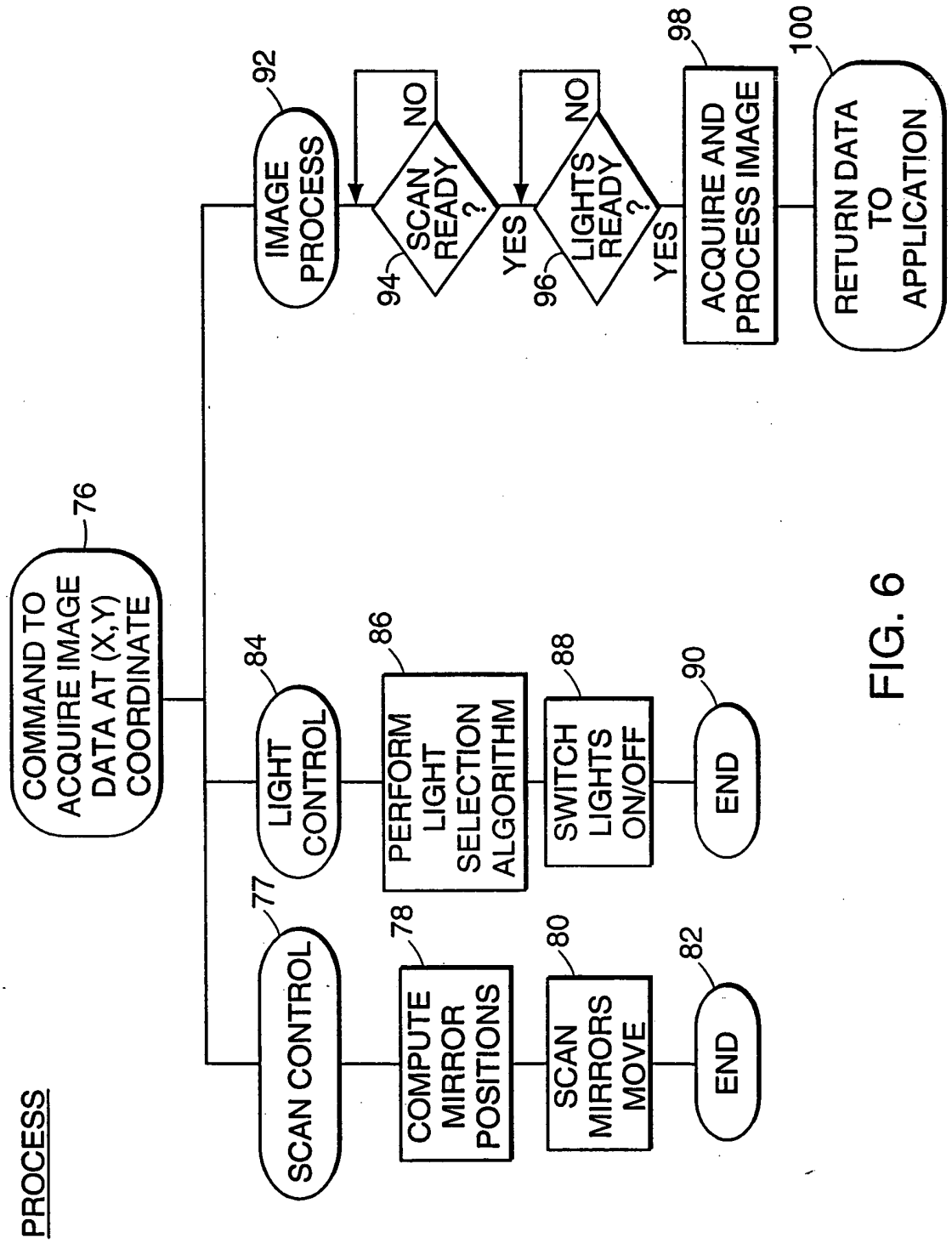
PROCESS
COMMAND TO ACQUIRE IMAGE DATA AT (X,Y) COORDINATE
76
IMAGE PROCESS
92
SCAN READY ?
NO
94
YES
LIGHTS READY ?
NO
96
YES
ACQUIRE AND PROCESS IMAGE
98
RETURN DATA TO APPLICATION
100
LIGHT CONTROL
84
PERFORM LIGHT SELECTION ALGORITHM
86
SWITCH LIGHTS ON/OFF
88
END
90
SCAN CONTROL
77
COMPUTE MIRROR POSITIONS
78
SCAN MIRRORS MOVE
80
END
82

FIG. 6

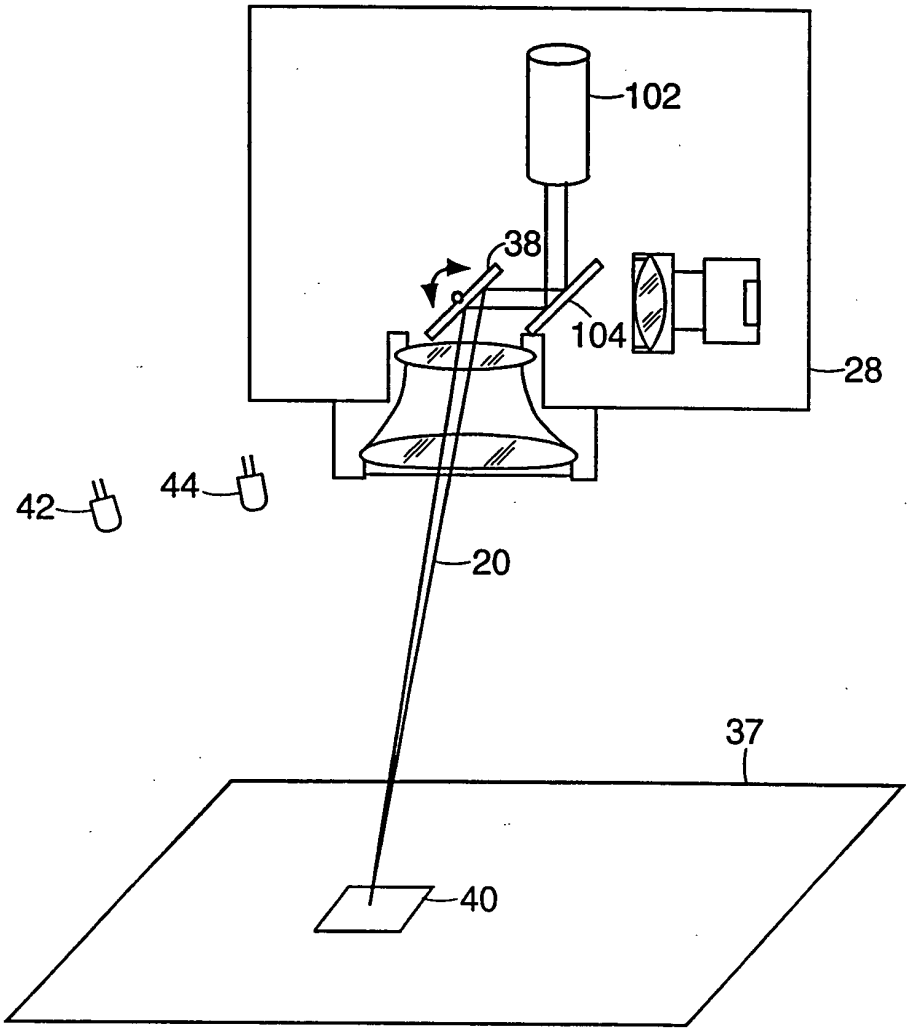

FIG. 7